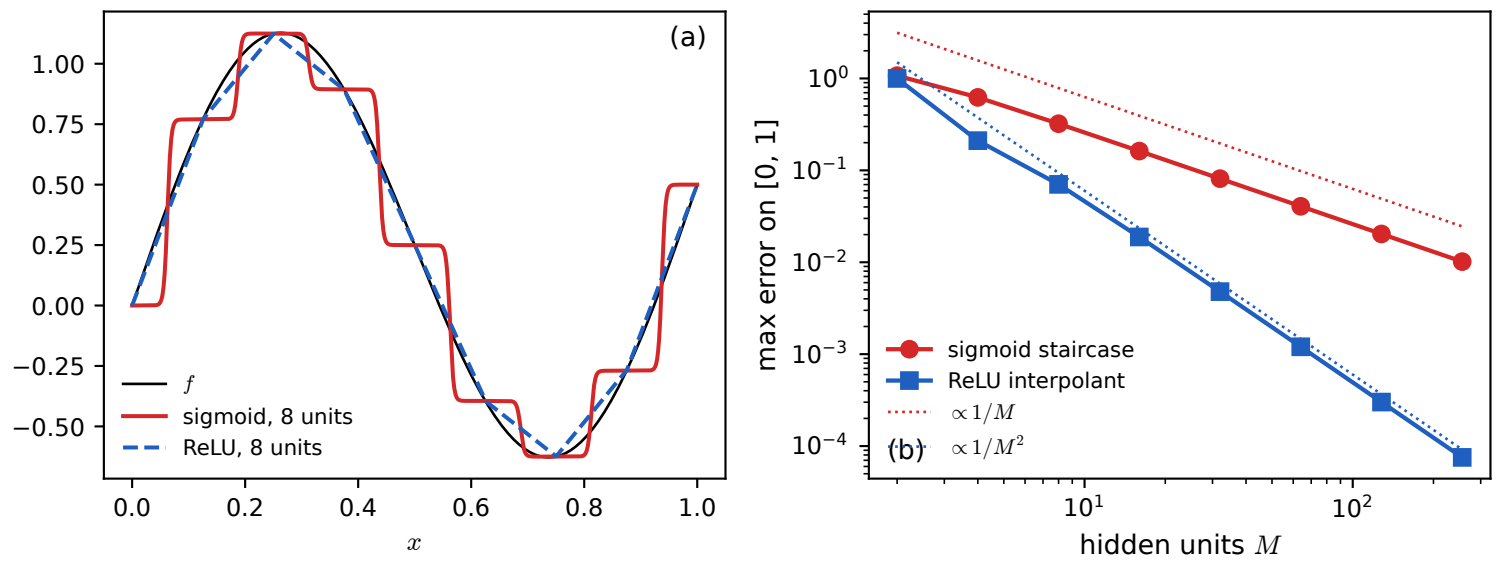

(a)
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
0.0
0.2
0.4
0.6
0.8
1.0
x
f
sigmoid, 8 units
ReLU, 8 units
max error on [0, 1]
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{1}
10^{2}
hidden units M
sigmoid staircase
ReLU interpolant
$\propto 1/M$
(b)
$\propto 1/M^2$